

Welcome



GENERAL CHAPTER <1469> NITROSAMINE IMPURITIES

Presented to: Prescription/Non-Prescription
Stakeholder Forum
November 19, 2020

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▶ BACKGROUND

- Introduction
- Emergence of Nitrosamines as Public Health Concern in Pharmaceutical Products
- USP (Pharmacopeial) Perspective for Addressing Nitrosamine Presence in Pharmaceuticals

▶ USP NITROSAMINE IMPURITIES JOINT SUBCOMMITTEE (JSC)

- JSC Charge
- JSC Immediate and Long-Term Deliverables

OUTLINE

- ▶ **TIMELINE OF GENERAL CHAPTER (GC) ‹1469›**
 - Publication in Pharmacopeial Forum Volume 46 Issue 5
 - Publication in Compendia and Official Date
- ▶ **GC ‹1469› CONTENT AND RATIONALE**
 - Introduction (1), Scope (2), Sources of Nitrosamine (3)
 - Risk Assessment and Control Strategy (4), Limits of Nitrosamines (5)
 - Testing for Nitrosamines (6) and Test Methods Performance Characteristics (7)
 - Analytical Procedures (8)
 - Additional Sources of Information (9)

BACKGROUND

Introduction

- ▶ Nitrosamines are common chemicals in water and foods including cured and grilled meats, dairy products and vegetables. Everyone is exposed to some level of nitrosamines.
- ▶ However, their presence in medicines, even at trace level poses high safety risks to patients because Nitrosamine impurities are probable human carcinogens.
- ▶ There are part of a group of high potency mutagenic carcinogens referred to as the “cohort of concern” in ICH M7. This “cohort of concern” comprises aflatoxin-like, N-nitroso- (functional group of nitrosamines), and alkyl-azoxy compounds